



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/706,240	11/03/2000	Ki-Hyun Joo	EXIO-004-DKA	6789
7590 05/31/2005 BARTON E. SHOWALTER, ESQ. BAKER, BOTTS, LLP 2001 ROSS AVENUE SUITE 600 DALLAS, TX 75201-2089			EXAMINER SCHEIBEL, ROBERT C	
			ART UNIT 2666	PAPER NUMBER

DATE MAILED: 05/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/706,240

Applicant(s)

JOO ET AL.

Examiner

Robert C. Scheibel

Art Unit

2666

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 04 January 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 13,15,19-21 and 23-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 13,15,19-21 and 23-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments, see page 7, filed 1/4/2005, with respect to the rejection of claims 23-26 under 35 U.S.C. 112, second paragraph, have been fully considered and are persuasive. The rejection of claims 23-26 under 35 U.S.C. 112, second paragraph, has been withdrawn.

2. Applicant's arguments, see pages 7-8, filed 1/4/2005, with respect to the rejection of claims 13, 15, 19-21, and 23-26 under 35 U.S.C. 103(a) have been fully considered but they are not persuasive. On page 7, applicant summarizes the rejection and restates independent claim 13. Applicant indicates that he believes that AAPA and Jorgensen fail to teach or suggest every element of this claim. In the first paragraph of page 8, applicant argues that the AAPA-Jorgensen combination fails to teach or suggest "address generation logic for dynamically generating a virtual circuit identity code (VCIC) for linking communication signals between said wireless signaling logic unit and said media gateway logic unit." Applicant argues that examiner fails to point to anything in Jorgensen as teaching the claimed element. Examiner respectfully disagrees with this argument. The previous rejection indicated essentially that Jorgensen inherently teaches this address generation logic by indicating that the virtual circuit must be inserted in each cell. Applicants further argue in the next paragraph that Jorgensen fails to disclose the dynamic generation of a virtual circuit identification code. Applicant cites passages from Jorgensen indicating that the reference refers to a fixed wireless point to multi-point telecommunications system. However, a fixed wireless system is still capable of dynamically generating virtual circuit identity codes. Jorgensen clearly indicates this in numerous places where he indicates that PVCs or SVCs can be used in the ATM network; it is well known that

Art Unit: 2666

SVCs (switched virtual circuits) are dynamically created virtual circuits as compared to PVCs and that the VCs associated with these virtual circuits are also thus dynamically generated each time a call is set up and torn down. At the end, applicant has emphasized the fact that the wireless devices are mobile, apparently implying that Jorgensen does not teach communications with mobile wireless devices. However, in view of the very broad claim language used in the independent claims, Jorgensen does in fact disclose this limitation. Jorgensen explains in lines 34-42 of column 6 that many alternative environments to the specific environment described in the patent can be used. Jorgensen also clearly suggests that this can include cellular and PCS systems in lines 3-7 of column 40, which are well known to support mobile wireless devices. It is therefore clear that Jorgensen discloses this limitation.

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims **13, 15, 19-21, and 23-26** are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted prior art (AAPA) in view of U.S. Patent 6,680,922 to Jorgensen.

Regarding claims **13 and 15**, AAPA discloses a multi-protocol packet-based base station in element 210 of figure 2. Applicant's admitted prior art discloses the limitation of the wireless signaling logic and the media gateway control protocol logic in lines 11-13 of page 4 (line numbers maintained from first office action and thus refer to the original specification). The

Art Unit: 2666

protocol units for handling wireless signaling and multi-media transactions clearly disclose the signaling and media control logic. Further, regarding claim 15, AAPA discloses the limitation of a call agent in element 220 of Figure 2 and the limitation of the mobile terminals adapted to communicate via multiple protocols in the mobile terminals of Figure 2.

Regarding claims **23 and 24**, AAPA discloses steps of receiving a call message and processing the call message in the protocol unit to handle wireless signaling described on line 12 of page 4 (line numbers maintained from first office action and thus refer to the original specification). It is inherent that the base station must receive call messages if the protocol unit is going to actually handle wireless signaling. Further, it is also inherent that the protocol unit for handling wireless signaling will process the call messages. AAPA further discloses transmitting messages to a destination using RTP/MGCP in lines 19-21 of page 4 of the updated specification and in Figure 2.

AAPA does not disclose expressly the limitation of the address generation logic for generating a virtual circuit identity code (claims 13 and 15). AAPA also does not disclose expressly the limitations of providing a virtual circuit identity code (claim 23) or providing a unique communication identifier (claim 24).

Jorgensen discloses a wireless base station 302 in figure 3B. This base station receives or transmits packets using a wireless protocol via interface 290d and transmits or receives them via the data network 142 to/from the IP Telephony Gateway 288b or the router 140d. Jorgensen teaches in lines 5-9 and 60-63 of column 33 that data network 142 can be an ATM network. As is well known and as Jorgensen teaches (see lines 15-17 of column 34 as one example), ATM uses virtual circuits to deliver information to the proper destination. It is clear that the wireless

Art Unit: 2666

base station must have a way of identifying which data traffic received using the wireless protocol is to be switched to which particular virtual circuit in order for the information (voice, data, etc.) to be delivered properly. The wireless base station must have address generation logic for generating a virtual circuit identification code so that the traffic can be properly routed to/from ATM virtual circuits and the wireless interface. Thus, Jorgensen teaches the limitation of address generation logic as well as the limitations of providing a virtual circuit identity code and a unique communication identifier. AAPA and Jorgensen are analogous art because they are from the same field of endeavor of wireless communication systems. At the time of the invention it would have been obvious to a person of ordinary skill in the art to modify AAPA to add address generation logic such that the base station could use an ATM based network. The motivation for doing so would have been to provide better real-time (CBR) performance as suggested by Jorgensen in lines 18-23 of column 35. Therefore, it would have been obvious to combine Jorgensen with AAPA for the benefit of better real-time performance to obtain the invention as specified in claims 13, 15, 23 and 24.

Regarding claims **19**, Jorgensen discloses the limitations in Figure 3B and the passages cited above. The base station uses an indicator to match the traffic from the wireless interface to the proper virtual circuit on the network 142.

Regarding claims **20-21**, AAPA discloses the limitations of these claims in Figure 2 and lines 19-21 of the updated specification. (The first protocol is TIA/EIA-634 and the second protocol is MGCP). Similarly, figure 2 and lines 19-21 of AAPA disclose the limitations of claims **25 and 26**.

***Conclusion***

3. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert C. Scheibel whose telephone number is 571-272-3169. The examiner can normally be reached on Monday and Thursday from 6:30-5:00 Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema S. Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2666

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*RCS 5-26-05*  
Robert C. Scheibel  
Examiner  
Art Unit 2666

*Seema S. Rao 5/27/05*  
SEEMA S. RAO  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800